AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of ~~controlling~~ reducing drag and vortex induced vibration in a substantially cylindrical element ~~consisting of~~ comprising providing a substantially cylindrical marine element consisting of an ultra-smooth surface about the cylindrical element having a K/D ratio of less than 1.0×10^{-4} ~~or less~~ where:

K is an average measure surface peak to trough distance and

D is an effective outside diameter of the cylindrical element.

2. (Currently Amended) A method of ~~controlling~~ reducing drag and vortex induced vibration about a substantially cylindrical marine element ~~consisting of~~ comprising providing an ultra-smooth surface coating about the cylindrical element ~~having~~ consisting of a K/D ratio of less than 1.0×10^{-4} ~~or less~~ where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the coating.

3. (Currently Amended) A method of ~~controlling~~ reducing drag and vortex induced vibration about a substantially cylindrical marine element ~~consisting of~~ comprising providing an ultra-smooth surface on a substantially cylindrical sleeve about the cylindrical element, the sleeve ~~having~~ consisting of a K/D ratio of less than 1.0×10^{-4} ~~or less~~ where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element, including the sleeve.

4. (Currently Amended) A system for ~~controlling~~ reducing drag and vortex induced vibration, ~~consisting of~~ comprising:

a substantially cylindrical marine element ~~having~~ consisting of an ultra-smooth effective surface with a K/D roughness parameter of ~~about~~ less than 1.0×10^{-4} ~~or less~~, where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element~~, including the sleeve~~.

5. (Currently Amended) A system for ~~controlling~~ reducing drag and vortex induced vibration ~~consisting of~~ comprising:

a substantially cylindrical marine element ~~having~~ consisting of an ultra-smooth coating material with a K/D roughness parameter of less than 1.0×10^{-4} ~~or less~~ where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the coating.

6. (Currently Amended) A system for ~~controlling~~ reducing drag and vortex induced vibration ~~consisting of~~ comprising:

a substantially cylindrical marine element ~~having~~ consisting of an ultra-smooth substantially cylindrical sleeve surrounding the marine element with a K/D roughness ratio of less than 1.0×10^{-4} ~~or less~~ where:

K is an average measured surface peak to trough peak distance; and

D is an effective outside diameter of the cylindrical element including the cylindrical sleeve.

7. (New) The method of claim 1, wherein the ultra-smooth surface comprises two or more parts which are attached about the substantially cylindrical marine element.

8. (New) The method of claim 2, wherein the substantially cylindrical marine element comprises two or more parts.

9. (New) The method of claim 3, wherein the substantially cylindrical sleeve comprises two or more parts which are attached about the substantially cylindrical marine element.

10. (New) The system of claim 4, wherein the ultra-smooth surface comprises two or more parts which are attached about the substantially cylindrical marine element.

11. (New) The system of claim 5, wherein the substantially cylindrical marine element comprises two or more parts.

12. (New) The system of claim 6, wherein the substantially cylindrical sleeve comprises two or more parts which are attached about the substantially cylindrical marine element.

13. (New) The method of claim 2, wherein the substantially cylindrical marine element comprises a high strength material selected from the group consisting of fiberglass, copper, carbon fiber, and metal alloys.

14. (New) The method of claim 3, wherein the substantially cylindrical sleeve comprises a high strength material selected from the group consisting of fiberglass, copper, carbon fiber, and metal alloys.

15. (New) The system of claim 5, wherein the substantially cylindrical marine element comprises a high strength material selected from the group consisting of fiberglass, copper, carbon fiber, and metal alloys.

16. (New) The system of claim 6, wherein the substantially cylindrical sleeve comprises a high strength material selected from the group consisting of fiberglass, copper, carbon fiber, and metal alloys.

17. (New) The method of claim 1, wherein the ultra-smooth surface comprises a K/D ratio 5.1×10^{-5} or less.

18. (New) The method of claim 2, wherein the ultra-smooth surface coating comprises a K/D ratio 5.1×10^{-5} or less.

19. (New) The method of claim 3, wherein the ultra-smooth surface comprises a K/D ratio 5.1×10^{-5} or less.

20. (New) The system of claim 4, wherein the ultra-smooth surface comprises a K/D ratio 5.1×10^{-5} or less.

21. (New) The system of claim 5, wherein the ultra-smooth coating material comprises a K/D ratio 5.1×10^{-5} or less.

22. (New) The system of claim 6, wherein the substantially cylindrical sleeve comprises a K/D ratio 5.1×10^{-5} or less.